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NEWS LETTER

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Information Division
Air Corps

March 15, 1932

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

Publishers are authorized to reprint material appearing in this publication.

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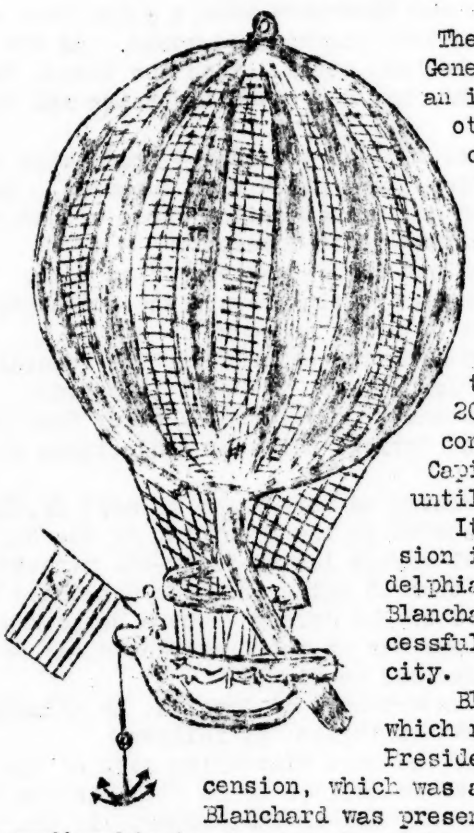
GENERAL WASHINGTON ENCOURAGED AERONAUTICS



The Bicentennial Celebration of the birth of General George Washington has tended to create an incentive among professional writers and others to unearth all possible incidents connected with the life and career of the Father of his Country. Along with this new flock of historians, who have sprung up almost overnight, the News Letter editor also caught the fever and started delving into various books and documents in an endeavor to discover if the subject of aeronautics had ever been brought to the attention of the great American, whose 200th birthday anniversary has been made a continuous celebration in the Nation's Capital, starting February 22nd and continuing until next Thanksgiving Day.

It is recorded that the first balloon ascension in the United States took place at Philadelphia on January 9, 1793, when Jean Pierre Blanchard, intrepid French aeronaut, made a successful ascent from the Prison Court in that city.

Blanchard arrived in America under auspices which resulted in his being presented to President Washington. On the morning of his ascension, which was advertised as his 45th aerial flight, Blanchard was presented by the President with a "Passport" recommending him to whomever he might meet during his ascent, descent or afterward. In the advertisement covering this flight it was stated that it was fixed positively for Wednesday, January 9th, weather permitting; that those who have subscribed on the blank subscription cards distributed thro' the city, are requested to send them to Oeller's Hotel, and those who wish to subscribe, may apply at the same place, until the 3rd of January, inclusively. Price of subscription, Five Dollars.

The "Passport" given Mr. Blanchard read as follows:

"GEORGE WASHINGTON, President of the United States of America,

To all to whom these presents shall come.

The bearer hereof, Mr. Blanchard a citizen of France, proposing to ascend in a balloon from the city of Philadelphia, at 10 o'clock, A.M. this day, to pass in such direction and to descend in such place as circumstances may render most convenient - These are therefore to recommend to all citizens of the United States, and others, that in his passage, descent, return or journeying elsewhere, they oppose no hindrance or molestation to the said Mr. Blanchard; And, that on the contrary, they receive and aid him with that humanity and good will, which may render honor to their country, and justice to an individual so distinguished by his efforts to establish and advance an art, in order to make it useful to mankind in general.

Given under my hand and seal at the city of Philadelphia, this ninth day of January, one thousand seven hundred and ninety three, and of the independence of America the seventeenth.

Signed GEORGE WASHINGTON."

The President, many of his Cabinet, a large number of members of both Houses of Congress, and a vast assemblage witnessed this epochal event in Philadelphia

(then the Nation's Capital). The whole town turned out - people came from miles around.

Blanchard's balloon was in process of inflation with hydrogen gas for an hour or more. Cannon fire had echoed at intervals from dawn of day - the final discharge coming just as the aeronaut left the earth. A band of music enlivened the occasion. At ten o'clock all was in readiness. Blanchard bade Washington farewell.

Then "the Bold Adventurer" sprang into the boat-shaped balloon car, with its gilt spangles glistening in the sun against a brilliant blue. His balloon was of a bright yellow varnished silk, and Blanchard wore a plain blue suit and a cocked hat with a white feather. The band played slow music. As the balloon began to ascend, the throng was absorbed and still. Then the throng burst into a great cheer. Blanchard doffed his hat and waved the Stars and Stripes and the colors of the French Republic.

The squares and streets of Philadelphia and the nearby roads were packed with people; housetops, and even steeples, were black with humanity. Blanchard, rising in his balloon, looked down upon an immense sea of faces of men, women and children alight with intense and enthusiastic interest.

Blanchard's aerial voyage lasted about three-quarters of an hour. The balloon rose rapidly and immediately began drifting toward the southeast, soon crossing the river into New Jersey - at 20 miles an hour.

Picking up the story at this point from the columns of "The Federal Gazette and Philadelphia Daily Advertiser," of January 10, 1793, it is stated:

"Anxiety for the safety of the Aeronaut was painted on every face from the time the citizens lost sight of him, and various were the conjectures as to the place where he would descend.

About half after 6 o'clock last evening we were happy to meet Mr.Blanchard again in this city going to pay his respects to the President of the United States. He informed us, that his aerial voyage lasted forty-six minutes, in which time he ran over a space of more than 15 miles and then descended a little to the eastward of Woodbury in the state of New Jersey - where he took a carriage and returned to Cooper's ferry - and was at the President's, as we have already mentioned at half past 6 o'clock last evening."

In Blanchard's book, reciting his experiences in America, he alludes to the receipt of the "Passport" from President Washington, as follows:

"I then received from the President the most flattering mark of his good will in the passport which he was pleased to deliver to me with his own hand. I never felt the value of glory so much as I did in that moment, in the presence of a Hero, whom she had constantly attended at the head of armies, and with whom she still presided over the councils of his country."

Describing his balloon flight and what transpired after he landed, Blanchard said that, meeting a citizen and relating the circumstances connected with his presence at that place, he showed him his passport. That individual beckoned to several persons, saying: "He has a certificate from our Washington, he has shewn it to me; but as I cannot read, come here and read it." Blanchard then goes on to say: "While these picturesque scenes were acting, I saw two women and several men on horseback arrive, who expressed as much pleasure as surprise, to see me thus in the midst of my colossal apparatus, which I was busy to arrange and put in order, for the purpose of facilitating its carriage. I could not, nor did I know how to answer all the friendly questions which they asked me; my passport served me instead of an interpreter. In the midst of a profound silence was it read with a loud and audible voice. How dear the name of Washington is to this people! with what eagerness they gave me all possible assistance, in consequence of his recommendation!"

Delving further into early aeronautical history in America, it is learned that the first balloon to be seen in this country was exhibited by Dr. Foulke, who lectured on the subject at the University of Pennsylvania, May 17, 1784, when he invited General Washington to attend. The first attempted ascent of an aeronaut is that of Joseph Deeker, from England, when his balloon was burned during inflation in New York, August 14, 1789.

Blanchard came to America after his celebrated crossing of the English Channel with Dr. Jeffries, the American. Intense interest was shown in these events by Washington, Adams, Jefferson, Madison, Monroe. It created wide discussion among Alexander Hamilton, Aaron Burr, Patrick Henry, John Hancock, Henry Clay, John Randolph, John Marshall and Paul Revere - and men who were building the new Republic.

MY EXPERIENCE IN HIGH ALTITUDE PHOTOGRAPHY

By Master Sergeant Andrew E. Matos,
Bolling Field, D. C.

On February 16th, I accompanied 1st Lieut. David W. Goodrich, Army Air Corps, on an experimental flight to determine the ceiling of a Fairchild Photographic airplane, also to obtain photographs showing the Capital, the new Mt. Vernon Boulevard and Mt. Vernon itself, 22 miles away.

The visibility from the photographic standpoint was fair. A service type K-3 camera was used with K-3 filter and super-sensitized speed film. The plane was serviced with 84 gallons of gas, and two tanks of oxygen with pressure of 1750 pounds in each. A centigrade thermometer with large figures was fastened on the strut. At 11:30 a.m., when we left the ground, the temperature was 38 degrees, and it fell to about 15 degrees below zero when we reached an altitude of 23,200 feet, at about 2:30 p.m.

The first 10,000 feet was made in 15 minutes, but it took 45 minutes of hard struggling to make the last 500 feet. Breathing ozygen from an ice-cold tank was like eating ice. The camera was frozen and very hard to operate.

The exposures were made about 2:30 p.m. As this was late for the time of year and there was considerable haze, the negatives were rather flat, somewhat under contrast. The results obtained, however, were very satisfactory. Six vertical photographs were made at three-minute intervals and, according to the overlap on photographs, the ship was making very little headway. There was a 90% overlap. We estimated that a 70 to 80-mile head wind was blowing.

Although there were solid blankets of haze restricted to certain areas, we could, from the height attained over the city, look beyond Baltimore and as far as Leesburg in the mountains to the northwest, and down the Potomac about sixty miles away, the Chesapeake Bay.

One of the greatest difficulties encountered in taking the photographs was the handicap imposed by the short length of tubing connected to my oxygen tank. It was less than a yard long, and it was almost impossible to move from the back of the plane to the front in taking obliques and verticals. It was also difficult to keep the mouthpiece from slipping out due to the excessive chattering of my teeth from the intense cold.

When making the last strip of photographs over the main part of the city, the left gasoline tank went dry and the motor stopped roaring, idling very slowly. For the moment I forgot my camera and turned my eyes toward the front of the plane. Usually in such cases Lieut. Goodrich's movements are very quick, but to my surprise he seemed to be moving very slowly, much the same as an actor on a screen in a slow-motion picture. Apparently his vitality was lowered by the rarefied atmosphere. Finally, he succeeded in pulling the throttle back, but it took both of his hands to turn the switch to the center tank. Immediately the motor started roaring again, and another photograph was made which, when compared with the others in scale, showed we had lost 2,000 feet altitude in these few seconds - quite in contract to the hard struggle we had undergone to gain the last 500 feet.

After being in the air three hours, my supply of oxygen was nearly exhausted, so when Lieut. Goodrich motioned to me to take more photographs I had to point to the dial which registered only about 300 pounds left in the oxygen tank. About twenty minutes later, when we reached the ground, we found to our surprise that, on comparing the oxygen tanks, Lieut. Goodrich had used about a third of his supply of oxygen, while mine was nearly gone. This was no doubt due to the fact that I consumed mine at a faster rate because of my moving about, lifting the heavy camera, opening windows, etc.

While in the air I felt a burning sensation in my stomach, due probably to a very light breakfast and no lunch, and I had a severe headache for some hours after landing. But we suffered no serious ill effects from the experience, cold as it was, and are well pleased with the results of our first experiment in high altitude photography.

GOAT INITIATED IN THE ORDER OF ARMY AIR CORPS INSIGNIA

Insignia designs thus far adopted by Air Corps organizations of the Regular Army, and approved by the War Department, depict such animals as a kicking mule, a leaping tiger, sea horse, buffalo, puma, wolf, beaver and monkey. This collection of four-footed creatures was recently augmented by another one which figures rather prominently in several slang expressions - a goat. The design reproduced to the left was submitted by the 62nd Service Squadron, Brooks Field, Texas. It was selected after both the commissioned and enlisted personnel of this organization had submitted designs, and was recently approved by the War Department.

The News Letter Correspondent goes on to say that the goat head design is considered especially applicable, since a Service Squadron bears the brunt of much of the utility work at an Air Corps station; also because the goat is noted for its ruggedness, its ability to exist in almost barren areas, its stamina in undergoing hardship, its agility and, under provocation, its ability to fight and fight well.

The 62nd Service Squadron is a war-time organization, although it experienced no service overseas. First organized at Mitchel Field, N.Y., as Air Park No. 7, it was transferred to Carlstrom Field, Arcadia, Fla., and, upon the removal of the Air Corps Primary Flying School to Brooks Field, Texas, it accompanied the School. In July, 1923, the name "Air Park No. 7," was changed to 62nd Service Squadron. The insignia just approved becomes the permanent identifying mark of the Squadron. Captain Louis R. Knight commands the organization, and other commissioned members thereof are 2nd Lieuts. Louie P. Turner, Assistant Transportation Officer of the Post; I.W. Ott, Assistant Post Engineering Officer; and E.H. Rice, E. & R. Officer and Adjutant of the Squadron.

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PURSUITERS START OUT ON SKIING EXPEDITION

Six pilots of the First Pursuit Group, Selfridge Field, Mich., (Captains Hlessley, Ballard, Lieuts. Hodgson, Olds, Ramey, MacDonald) and two members of the Materiel Division, Wright Field (Lieut. A.R. Crawford and Mr. Bosler) took off recently on a mission with the purpose in view of finding snow and testing recent landing skii developments. The principal object of the trip was to make a general comparison between wheel skiis and skiis without wheels, and having done this to determine the best skii of the several types submitted.

Arriving at Madison, Wisconsin, on the afternoon of Feb. 18th, the airmen spent the night there and took off the following morning for St. Paul, Minn., to begin the tests. In several respects the snow conditions around St. Paul were ideal for such a test. All normal snow conditions, except very deep snow, were encountered, and some snow as deep as 18 inches was found on sheltered frozen lakes. All types of skiis were found to be successful in varying degrees. In spite of their small bearing surface, the wheel skiis proved to be entirely adequate for landings and take-offs in all conditions of snow. Their drag on the surface is somewhat greater than flat skiis, but, of course, their value is felt when any bare ground is encountered.

The expedition remained in the vicinity of St. Paul and Minneapolis for about five days and returned to Selfridge Field via Chicago. The trip was made with no serious mishap and was successful in its mission.

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"Page Captains A.F. Hegenberger, Wendell Brookley and H.R. Wells," says the Materiel Division News Letter Correspondent, and then adds: "On second thought, better page them as Lieutenants, as they may not recognize their new titles."

NAVAJOS GRATEFUL TO THE AIR CORPS

"At a time when many pointed references are being made to the Army as 'a costly and useless implement of destruction,'" writes the March Field Correspondent, "it was recently the privilege of the 11th Bombardment Squadron to add to the already lengthy list of 'Things The Army Does Besides Fight.' On January 16th, six Curtiss Condor Bombers under command of 1st Lieut. C.H. Howard, of the 11th Bombardment Squadron, left March Field for Winslow, Arizona, under orders to report to the Supervisor of Indian Agencies for the Navajo Reservations in that section. The work they accomplished is by now well known to even a casual newspaper reader. In a period of five days, close to 40,000 pounds of bulk food was distributed to an estimated 20,000 Navajo Indians, who were facing starvation because of the fact that unprecedented heavy snows had blocked all roads for many weeks. During the period Jan. 17th to 22nd, the planes covered sections of four States: Arizona, New Mexico, Utah and Colorado, as they penetrated the farthermost recesses of the reservations under the direction of guides from the Indian Headquarters at Winslow and Holbrook.

Indians of the Black Mountain and Navajo Mountain regions had their first opportunity to see an airplane at close range, when the huge Condors with 100-lb. sacks of rations hung on the bomb racks and packed in the nacelles, swung low over their villages and 'hogans,' circled over the 'target' and dropped their ration bombs. 'Chity Nah Tiagie,' they must have shouted to each other, the Navajo words for airplane-chug, chug, overhead. It is possible the Signal Corps could get some pointers from our 'primitive brethren,' inasmuch as it was pointed out that even in the most snowbound and remote villages, where all means of communication was apparently cut off, word that the 'Father in Washington' had sent food with his 'automobiles in the air' had spread over the Indian Grapevine Telegraph.

The moment the planes appeared near most villages, crowds of Indians poured in the open to wait for the Army's 'flying bread line.' The six ships engaged in the mission flew approximately 15,000 miles during the mission and covered an area of approximately 20,000 square miles in their search for the stricken Navajo villages. The temperature during the entire period was close to the zero mark, which necessitated night crews to keep the motors turning over hourly."

"The Navajos never tire of telling of their emotions when they saw the big Army planes flying over their country, and particularly when they became aware that food was being dropped," writes Mr. John G. Hunter, Superintendent of the Southern Navajo Agency, Fort Defiance, Ariz., to Lt.-Col. Henry H. Arnold, Commanding Officer of March Field, Riverside, Calif., in expressing his gratitude to the Army Air Corps for its cooperation in a grave emergency.

Mr. Hunter states the prompt and efficient service rendered by the 11th Bomb. Sqdn. relieved much distress, the Navajos stating they were not only greatly helped by the food dropped from the planes, but also felt assurance that the Government was doing, and would do, anything possible to help them.

The remaining portions of Mr. Hunter's letter are quoted below, as follows:

"The Navajo Indians and the friends of the Navajos are very grateful for the services rendered by the 11th Bombardment Squadron in delivering food supplies to the needy people of their snow-blocked country, and it is the purpose of this letter to state conditions which led up to the request for these services, and to express appreciation in behalf of the Southern Navajo jurisdiction for the assistance given.

The weather experienced in this country during the past sixty days has been unprecedented in severity. One snowstorm followed another, with the result that roads to a great many sections were kept completely blocked for such a long period of time that the supplies of the Indians, and also the supplies of the traders, were practically exhausted. During this entire time this Agency had three Caterpillar tractors, each equipped with a snow plow, operating almost continuously, but almost as fast as the roads were opened they were blocked by drifting snow or by additional snowfall. Owing to the extreme isolation of many Navajo communities, together with distances ranging from 10 to 150 miles from base of supplies, the conditions described culminated in the crisis which prompted the request of the Commissioner of Indian Affairs for aid from the War Department.

Lieut. Howard, the officers and enlisted men of his command, are deserving of highest praise for the conscientious and tireless effort put forth by them, and for the outstanding success which they achieved in attending the business of their expedition. I never witnessed greater efficiency than was demonstrated by the 11th Bombardment Squadron. My association with the members of this Squadron shall remain as one of the high points of my life, and shall cause me to more fully appreciate the Air Corps of the United States Army and the principles and standards of conduct and efficiency which this organization maintains, and I may safely state that this sentiment is shared by every one with whom they came in contact while in this section of the country.

The activities of the 11th Bombardment Squadron will ever be an important part of the history of the Navajo Indians, which tribe now numbers more than fifty thousand souls. They will always cherish in their memories the timely assistance given, and will much more thoroughly appreciate the United States Army and the Government for which it stands."

Asserting that he never worked with a finer or more systematic and agreeable bunch of men than those of the 11th Bomb. Sqdn., Mr. C.L. Walker, Superintendent of the Western Navajo Indian Agency, Tuba City, Ariz., in a letter to the Com-

manding Officer of March Field, adds that from Commanding Officer to Private they showed that they had the interest of their work at heart, and were capable in every respect. They were on the job constantly, and the organization worked perfectly."

The official report of Lieut. Charles H. Howard, commanding the flight of planes from the 11th Bomb. Squadron, which participated in relief operations over the Navajo and Hopi Indian Reservations, was recently received by the Chief of the Air Corps. Although the last issue of the News Letter touched upon the splendid work performed by this relief expedition, Lieut. Howard's report is of such unusual interest as to justify full quotation thereof, viz:

"a. Reference to a map of Northern Arizona will show the areas covered by the Western and Southern Navajo Reservations. It will be noted that this area completely encompasses the Hopi Reservation.

b. The snow line extended from a point about thirty miles north of Winslow where the elevations are some 500 feet above that point. Eastward the snow line began about Holbrook and the ground was completely covered in the entire eastern area. The snow became deeper as the altitude increased, there being in all areas a marked difference in depth on the wind-swept mesa and the valleys and canyons. Long parallel drifts on the open areas gave testimony to the violence of the blizzards. It was noted that the unsheltered hogans had a definite open pathway entirely surrounding the structure. At first glance it was thought to be a path cleared by the Indians, but investigation proved it to be an aerodynamic phenomena due to the extremely high wind velocities. Hogans in the valleys were entirely snow covered.

c. The number of snow-bound Indians in the Western Reservation was estimated at some five thousand, while in the Southern area there were some sixteen thousand. It will be seen that the Western area is very sparsely settled. On this account, two ships were assigned to this area and four to the Southern.

d. The problem was not only one of food dropping, but of locating the proper place. This information was known only to the Indian agents and their associates who acted as guides. Mr. C.L. Walker of the Western Area, and Mr. J.G. Hunter of the Southern Area, rode every mission and much credit is due them for keeping going under extremely uncomfortable flying conditions. The proper distribution of food was possible only through their intimate knowledge of the country. Altho many places bore names on the map, they actually consisted in many cases of only a single hogan or house.

e. This condition is characteristic of the Navajo Indian. He, it was understood, is essentially a nomad, living and moving with his flock. He is independent and in many cases the nearest neighbor was from one quarter to a mile away. The hogan is a semi-spherical dwelling of mud and sticks, with a smoke hole in the top and a door opening to the east. Each hogan had its sheep corral of vertically placed posts, and in many cases the only trail visible was between hogan and corral. This mode of life is in distinct contrast to the Hopi Indian, who is a village dweller and an agriculturist.

f. In searching such areas for needy Indians, it was the Indian Agent's familiarity with his district that enabled the planes to drop food at the proper hogan. It being impossible to drop a sack at each hogan, the community center or hogan of the local head man was chosen as a distributing point to which the Indians could break trails. In several instances, localities which usually have a number of families were found deserted, so search was necessary to find where they had moved to escape the severe storms.

g. In anticipation of dropping rations in burlap sacks, half of each bomb bay had been floored with the idea of having a man heave the loads out on signal from the pilot. Bulk and inconveniences immediately showed this to be a poor arrangement. In anticipation of the possibility of using the bomb racks as carriers, Lieut. John S. Mills, Squadron Armament Officer, had carried a full complement of bomb shackles, and these solved the problem.

h. The ration as made up by the Indian authorities consisted of the following articles and amounts: 48 lbs. Flour, 10 lbs. Sugar, 4 lbs. Salt Pork, 10 lbs. Coffee, 2 lbs. Baking Powder, 10 lbs. Beans, 10 lbs. Dried Fruit.

A sample bag of these articles was made up in a burlap bag and dropped at low speed and altitude on the airdrome and instantly disintegrated. On the next attempt, each article was placed in a burlap bag, tied, and the whole placed in a larger sack. This was bound much as a blanket roll is roped, with two bands around the diameter. The bomb shackle was hooked to these latter ropes and the bag hung on the rack. It was found possible to place ten such sacks in each bomb bay, leaving very little free space, however. The total weight of each bag averaged 98 pounds, making a bomb load of roughly 1,000 pounds. Of all the lots dropped, not to exceed four burst open, and in these the inside sack saved the contents. The depth of the snow aided materially in preventing destruction.

i. Due to the fact that no landings were made on these missions, little direct contact or information was received from the Indians. Their reactions could be judged only fleetingly by the pilots. In one instance, a drop was made in an extremely isolated spot about 30 miles west of Cameron on a high plateau. On the approach of the plane, an Indian woman came out of the hogan to observe. As the ship came in and dropped several sacks, she was back into her house in one dive and no more was seen of her. This was the only instance where fear was shown. On a later drop in the Painted Desert Region, near the junction of the Little Colorado and the main stream, an Indian seemed to sense the coming of

of food and waved his arms vigorously as if to attract attention, finally getting out a blanket and waving that. After the first bag was dropped, the whole family came out making several desperate but futile attempts to retrieve the sacks before the next round of the plane, but running to safety without their food. This hogan was the only one for several miles in a desolate and isolated spot, so near the edge of the canyon of the Little Colorado, that at each pass the pilot found himself out over a canyon with 3,000-foot vertical sides. This whole region lay under a solid blanket of snow, ravines and gullies so filled that it looked like a flat plain. Another drop was made at a point called Copper Mine, about 30 miles east of Lees Ferry. This was made on the last day of the expedition, and a notable increase of foot trails could be seen. The drop here was made at a hogan to which all trails seemed to lead. The Indians here were very shy and hid behind walls and corral until satisfied that the last bag was dropped before venturing out to get the food. In nearly every instance after the first bag dropped, the Indians all understood what was being done, and waved their arms in apparent appreciation.

The closest contact with a real Indian came with the arrival of Mr. Clyde Lizner, one of Mr. Hunter's guides. He is a well educated Navajo and of some wealth. He watched closely the processes of loading and other incidents. That evening, he saw his name on a bulletin board and listened intently to all instructions. The next morning, he donned his flying equipment, parachute and all, without a word of instruction, climbed into the proper seat and unerringly directed the pilot to his destination.

j. As noted before, the Hopi is a village dweller and here are located the local store, and in many instances a government agency. These, in contrast to the Navajo mode of life on the plains, form a storehouse upon which the Hopi can draw in emergencies such as this. For this reason it was necessary to drop food in only two places in the Hopi country. One at Pinon, about 20 miles north of Kearns Canyon, and another at Coal Mine, a source of that fuel in the Indian country. In the Southern Navajo country, relief extended south of Gallup, New Mexico, into the Zuni country. Snowfall was heavy in this section, but constant effort had opened several of the main roads. It was in this section that last November some 2,000 Navajos, on their annual pinon or pine nut harvest, were trapped. At this time they were fed by hospitable Zunis for a long period. Strenuous work by road crews under direction of the Indian Agents made it possible to get all these Indians out without loss of life. This annual pinon harvest is not made with an idea of storage for winter food, but the crop is marketed, principally through the Fred Harvey system.

As stated before, this trip developed very little of first hand reactions of the Navajos. Reports to the government agents by telephone indicated that at such places as gatherings were possible, that deep gratitude was felt toward the 'chiti-no-tah,' or automobile that flies."

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CATASTROPHE FOLLOWS STARTING OF BT2A

"What with fried mice in the radio transmitter and this and that," says the News Letter Correspondent, "Mather Field is making a rare collection of natural history stories. The latest is vouched for by the officers and men of the 80th Service Squadron, but your correspondent takes no responsibility.

"Seems that in making a routine inspection of the line one day, Major Tinker singled out a BT2A of the 80th Squadron and ordered it started. Off it went, and immediately, with a cough and a sputter, died again, to the accompaniment of such a series of wails and screams as has never been heard since the Spanish Inquisition. This, at a Saturday morning inspection, was decidedly irregular; so, as soon as the mechanics could be coaxed from the hangar tops to which they had retired, an investigation was in order.

"Guided by various scratchings and small yells, some brave soldier removed the cowling over the motor and found in the carburetor air scoop a very much agitated yellow tom cat, all claws and tail, that had evidently taken refuge there from the cold night air."

The Correspondent concludes his story with the statement that the motor of the plane was not damaged but that no one has seen Mr. Thomas Cat since he faded over the horizon.

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Send in your news contributions to the News Letter on the first and 15th of the month.

RANDOLPH FIELD GRADUATES ITS FIRST CLASS

The first class to graduate from Randolph Field, the new Air Corps Training Center, numbers 101 students, comprising two officers of the Regular Army, a German Army officer and 98 Flying Cadets. These Primary Flying School graduates were transferred March 1st to Kelly Field, Texas, for advanced flying training. Their names are listed below:

2nd Lieut. William T. Hefley, Jr. C.E.
2nd Lieut. Russell A. Wilson, S.C.
Captain Eberhard F. Baier, German Army.

Flying Cadets

Wilbur W. Aring
Carl F. Baker
Stephen A. Beck
Lloyd I. Belden
Jasper N. Bell
A.J. Bird, Jr.
William I. Bogardus
William F. Bonnell
Adrian Borchers
Henry O. Bordelon
Aldor W. Borgers
Robert W. Brady
William F. Brannon
Cedric J. Brockliss
James L. Bruce
Martin B. Cahill
George S. Cassady
Frank W. Cazier
John W. Christner
Randolph E. Churchill
Glenn C. Clark
William L. Clark
William L. Combest
Robert E. Cooper, Jr.
Emmett J. Corrigan
Harry Coursey
Dudley S. Cox
Homer M. Cox
Harry H. Culler
William E. Davis
Marvin C. Demler
William G. Ditzen
John C. Doherty
Hubert B. Duckworth
Carl H. Eaker
Lloyd W. Earle
Scott Flower, Jr.
John S. Fouche, Jr.
Frederick R. Freyer
Thomas L. Gates
Clifton V. George
Marvin C. Glasgow
George L. Govoni
Donald W. Haarman
Olin K. Haley
Edward N. Hamilton
Paul J. Hanspeter
Clyde C. Harris, Jr.
Richard W. Henderson
Cecil R. Hoffman
Lewis Horvath, Jr.
Louis R. Hughes
Jack S. Hunt
Wilburn R. Hunt
Don L. Hurst
Edmund L. Jackson
Robert E. Jarmon
Theron S. Jobson
William W. Johnson, Jr.
John R. Kane
Gregory F. Keenan
Lester E. Krug
David B. Lancaster, Jr.
William T. Lovelace
Howard W. Mackelcan
Francis W. Matthews
Howard A. Moody
Ralph J. Moore
Ormond J. Mosman
George M. Murchison
Jesse Neal
David R. Nelson
William P. Nuckols
Walter A. Oglesby
Byron G. O'Hara
Noel F. Parrish
Samuel V. Payne
Donald E. Philip
Brittain H. Purser
Joseph R. Qualm
Jack L. Randolph
Roger M. Reynolds
Harold G. Richardson
Nathan F. Searles
Moir L. Shockley
Elton Smith
John P. Spake
Noble O. Sprunger
Fred D. Stevers
Henry H. Swift
William L. Trimble
Marion D. Unruh
Roy P. Ward
Ralph L. Wassell
Richard C. Weller
Paul S. Woolley
James T. Workman
Steve L. Zelazo

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SERGEANT COLLINS COMMENDED FOR BRAVERY

In a General Order issued at Raldolph Field, Texas, Staff Sergeant William M. Collins, 67th Service Squadron, was commended for bravery. On January 25th, a gas torch broke and scattered flames far and wide in the Engineering Shop on the post, and Sergeant Collins with disregard for his personal safety, promptly put it out. The torch was being used for welding parts of an airplane and when the hose broke the tank would have blown up had it not been for Sergeant Collins' prompt action and disregard for his personal safety.

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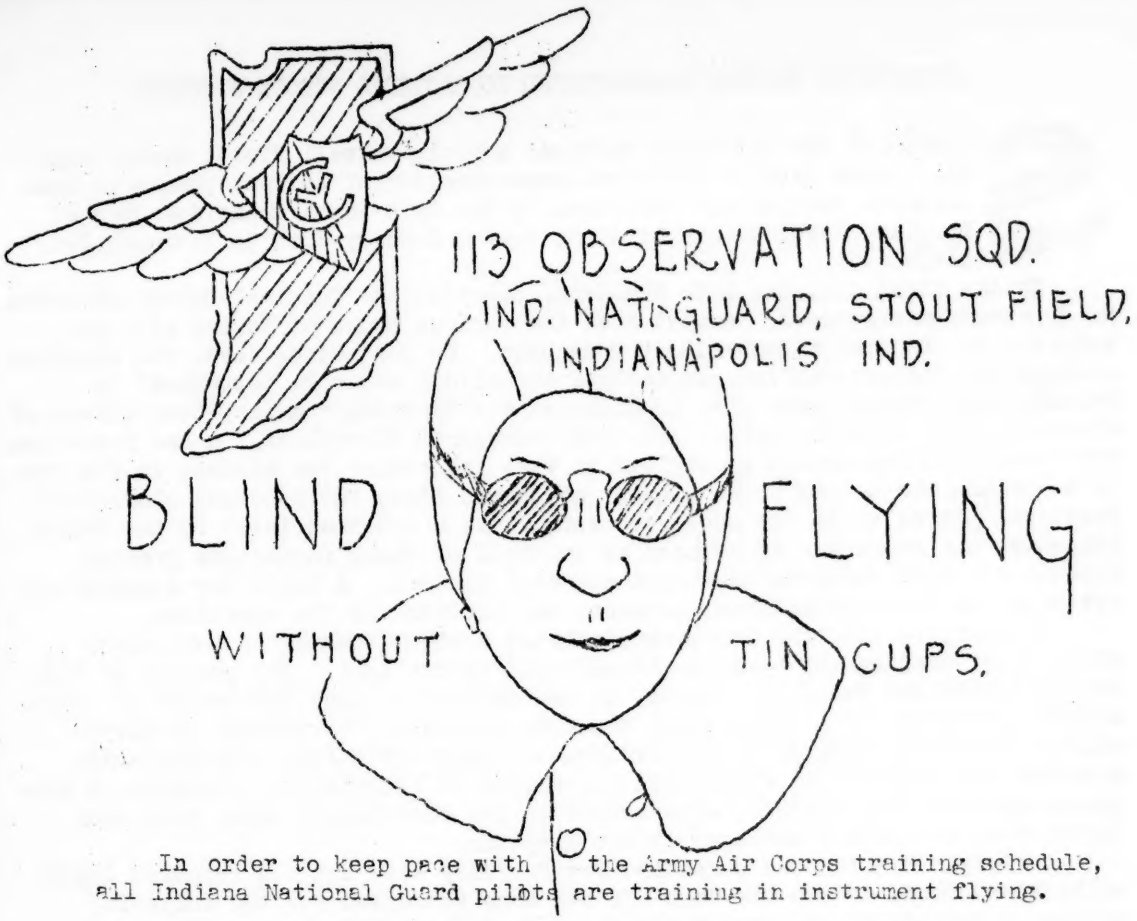
Bolling Field is testing a new method of boundary lighting. A small one-sixth h.p. motor operates the mechanism, allowing the intensity of the lights to vary. All the boundary lights operate from field intensity downward to a low order of intensity. From a distance the lights appear as blinkers. The incoming pilot sees a field defined by blinking lights which instantly catch his eyes.

Pilots stationed at Bolling Field and those on duty in the Office of the Chief of the Air Corps flew a night mission recently, and each one reported favorably on this system of lighting the field.

V-6247, A.C.



In order to keep pace with the Army Air Corps training schedule, all Indiana National Guard pilots are training in instrument flying.

To make possible instrument flying, the 113th Observation Squadron, Indiana National Guard, have a sliding cover for the front cockpit on O-38B ship, adjustable in flight by the pilot.

Construction of this device consists of two 3/8" tool-steel rods running lengthwise on each side of cockpit and clamped at each end to the longerons. This acts as a track on which slides a N shaped bow made of 3/16" x 1" strap iron which has #2 length steel tubing attached to each end, which slides on the steel rods. This end bow has two handles on inside, in order to move the bow forward to rear edge of windshield. Another bow is fastened to rods at rear and made secure to cowling in front of rear windshield. A canvas cover is laced around rear and front bows and to rings along the sides, which slides on steel rods.

After taking off, the pilot slides the front bow forward to rear edge of front windshield and makes secure by flaps which are part of the canvas cover, to lift-a-dot fasteners on inside of cowling in front of windshield. This completely covers the cockpit except for a small opening in back, which permits any gas fumes which might be in the cockpit to escape, and also permits the check pilot to see the pilot at all times.

The blind flying is done at a minimum altitude of 2000 feet, and there is always an assistant pilot in the rear cockpit to take charge if the blind man goes hay wire.

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With all flying equipment, uniforms, buildings and what have we, polished to the utmost, the Squadron stood the annual federal inspection under Lieut Colonel H. C. Kress Muhlenberg, Air Officer, Hq.5th Corps Area, on Sunday and Monday February 14 7 15th.

We hope we looked as good to the Colonel, as we felt about ourselves. As for the planes the mechanics reached the height of gloss in polishing the planes, and if they look better next year we'll have to wrap them in cell-O-phane.

BOMBARDMENT TACTICS DEMONSTRATED TO TACTICAL SCHOOL STUDENTS

STUDENTS of the Air Corps Tactical School, Maxwell Field, Montgomery, Ala., were given a practical demonstration of salient phases of bombardment tactics and technique by the 96th Bombardment Squadron of Langley Field, Va., during the period January 25th to February 3rd, inclusive.

On the first day, the 96th Squadron, carrying the Tactical School students as observers and gunners, demonstrated the various means of taking off, assembling and landing a bombardment formation. On succeeding days, the Squadron assumed its various machine gun defense formations and were "attacked" by Pursuit with camera guns. Two formations, the "javelin," a step-down column of elements, each slightly offset, and the "staggered cloverleaf," a new formation different from the normal cloverleaf in that the number two element is staggered below and the number three element staggered above their normal cloverleaf position, proved to be the most successful. At a critique later by the School students, the concensus of opinion as to which of these formations present Pursuit the most unfavorable target appeared divided. A basis for comparative estimates of these formations, however, was provided by the exercises.

On February 1st, the Squadron simulated a night bombing of Montgomery while under harrassment by anti-aircraft and searchlight. The purpose of this demonstration was two-fold. First, it was desired to show the method of night attacks conducted by a Bombardment squadron attacking "by threes" at three-minute intervals; second, it was desired to demonstrate from both the anti-aircraft and bombardment standpoint the method of illuminating Bombardment airplanes and how they appeared when caught in the searchlight beam, both when viewed from the ground and when in the airplane.

A similar mission was scheduled for February 2nd, but was rendered impossible by weather, as was the take-off for home scheduled for the following morning. Despite the relatively slow speed of the B-6 Bomber, a 50-mile an hour tail wind enabled the Squadron to make record time home.

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DEMONSTRATION OF VERY PISTOLS AND SIGNALS AT BOLLING

Captains Coupland and Stribling, Ordnance Department, recently witnessed the demonstration of 25-mm. Very Pistols and Signals conducted at Bolling Field by Messrs. Fisher and Biddle, representatives of the Erie Chemical Company, Cleveland, Ohio. Two representatives from the Department of Commerce and two from the Coast Guard also witnessed the tests.

Several red, white and green Single Star Signals, without parachute, were fired in front of the Operations Office at the field. The recoil of the pistol was not excessive. After this firing, several signals were fired from the other side of the flying field at a distance of approximately one-half mile, the observers remaining at the Operations Office. All of the red, white and green signals were very distinctive, and it is estimated would have been visible under ideal weather conditions at a distance of from three to five miles. It is estimated that the height of projection was approximately 100 feet. There were three or four misfires during the firing of the 12 or 15 signals. Several of the White Star Signals failed to ignite.

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NEW BOEINGS ARRIVE FROM SEATTLE

Fifteen of the new Boeing P-12E Pursuit planes arrived at Selfridge Field on February 11th, having been ferried from Seattle, Wash., to Detroit, by way of Rockwell Field, Coronado, Calif.

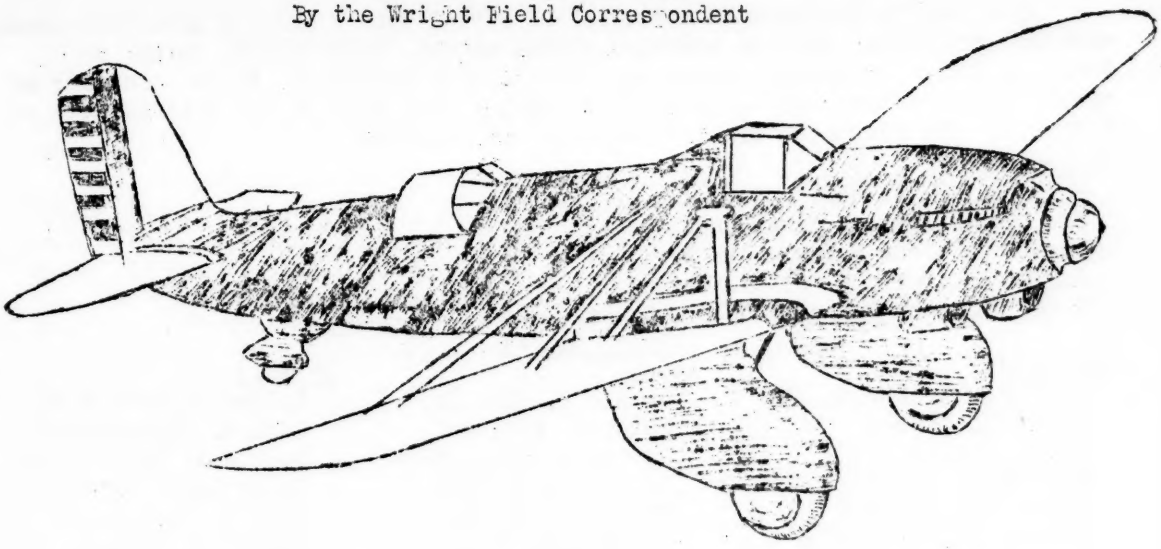
Up until February 10th, the trip had been pleasurable and uneventful. On that morning, taking off from Scott Field in 3-plane elements, bound for Selfridge Field, dense fog and dangerous flying conditions were encountered in Indiana, which were apparent around Selfridge Field around 12:30 and were indirectly the cause of Lieut. Webber's unfortunate crash. Nine of the planes retraced their route and landed at Chanute Field. Three others were forced down at Rochester, Ind., and late in the afternoon proceeded to Fort Wayne for an overnight stop. Three other planes sought the safety of the Transcontinental Airport at Toledo, but while flying near Toledo in the direction of the airport, one of the formation disappeared. This was Lieut. Feldmann of the 94th Pursuit Squadron who, finding himself alone and with fog closing in on him, landed in a hurry in the best available field. His safe landing under very adverse conditions was deserving of the congratulations which his fellow officers bestowed upon him.* All fifteen planes arrived at Selfridge Field intact by 1:00 o'clock the following day.

Division,

*Note: An officer of the Information, on business at Toledo that day, also saw the back yard surrounded by high tension lines and trees where Feldmann landed, and also congratulates him on his skill.

A NEW ATTACK TYPE AIRPLANE

By the Wright Field Correspondent



The Curtiss XA-8, the Army's latest model of an Attack airplane, has elicited great interest throughout the Air Corps. From the points of view of design and performance it appears most promising. The earlier Attack airplanes were virtually modified Observation airplanes of biplane type. For some years it was realized that the internally braced metal monoplane, with fuselage of metal monocoque construction offered reduced drag and parasite resistance in comparison with the biplane types, but an objectionable wing "flutter" when dived at high velocity made it impossible for military use. A vast amount of work devoted to this problem led to the elimination of this difficulty and the development of the present attack type, soon to be released for service testing to Air Corps stations.

Fuselage, wing, and landing gear of this airplane quite successfully fulfill the modern demand for aerodynamic cleanness. This airplane is a low-wing monoplane of cantilever two-spar construction. The exceedingly thin wing is wire-braced, with dural spars and built up box sections. It is equipped with slots and flaps. The covering is fabricated from smooth suralumin sheet. Provision is made for the mounting of guns for attacking ground troops beneath the wing to either side of the fuselage.

The landing gear is of the split-axle type with oleo shock absorbing system. Cockpits are hooded for the protection of pilot and observer, and streamlined into the fuselage. Streamline fairings are also incorporated in the design features of landing gear and tail wheel.

The power plant of this airplane consists of a liquid-cooled Curtiss V-1570-C engine, known commercially as the "Conqueror." It is rated at 600 h.p. at 2400 r.p.m. A three-bladed metal propeller gives improved performance and justifies the increase in weight over the two-bladed type. Speed is the predominating performance characteristic, and tests have proved this airplane to be faster than any foreign types that could be used against it.

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ATTACKERS PARTICIPATE IN PARADE

Members of the 8th, 90th, 13th and 60th Squadrons of the Third Attack Group took part in the Mardi Gras parade at Galveston, Texas, on February 8th. Marines and sailors from the U.S.S. WYOMING also took part in this annual affair.

King Frivolous XV arrived by plane and rode in the parade in a Supercharged De Lux Model Monoplane whose Ford tractor engine permitted the high speed of 10 miles per hour.

Ambitious airplane designers and builders of the 60th Service Squadron were quite proud of their creation. This year's crate was an improvement over the one which was used last season, in that it did not fall apart before the parade came to an end. So sturdily was it constructed that it has been taken down and stored away for future use.

GRADUATION OF STUDENTS FROM ADVANCED FLYING SCHOOL

Ninety-eight students (4 officers, 93 Flying Cadets and one noncommissioned officer) graduated from the Advanced Flying School, Kelly Field, Texas, on February 23th. An aerial review was flown in the afternoon, in the presence of nearly 5,000 persons, and graduation exercises were held in the Post Theatre at 3:00 p.m. The graduates are listed below, as follows:

Observation

Major Wm. E. Kepner, A.C.
2nd Lieut. David H.Baker,CAC.
2nd Lieut. John P.Doyle,Jr.,Cav.
2nd Lieut. David R. Gibbs, Cav.
Staff Sergeant Jerome Brooks McCauley, (2nd Lieut. QMC Res.)

Flying Cadets

Observation

Burton W. Armstrong, Jr.
Joseph A. Barnes
Hiram Broiles
Carl Frank Bruce
Lewis John Connors
Timothy James Creedon
Benjamin H. Dally, Jr.
Thomas Smith Davis,Jr.
Harry Wagner Fanning
James Lowell Fletcher
Pearre DuB. Jacques
Henry C. Kristofferson
James A. Maxwell, Jr.
Jack D. Milstead
Erickson S. Nichols
Dudley H. Pierce, Jr.
William Pierce, Jr.
Reuben LeR.Spickelmier
Howard C. Stelling
Foster Craig Townsend
Mack Olin Travis, Jr.
William R. Walner, Jr.
Doyle Cassius Warren
Lawrence K. Welch
Maurice Wight Wiley

Attack

Loren Cornell
Herbert F. DeBuys
Eugene Fletcher, Jr.
Wayne C. Gardiner
Walter E. Lawrence
Archie J. Old, Jr.

Attack

Archie J. Old, Jr.
Peter J. Prossen
George B. Schoonmaker
Don Wesley Smith
Joseph C. Taylor
Randolph L. Wood

Bombardment

Walter McLain Bass
Robert B. Collins
Merrill E. DeLonge
Richard F. Fender
Joseph D. Hutchinson
James Matthews
Joseph A. McAnulty
Eugene H. Mitchell
Joel B. Moore
James H. Patrick,Jr.
Wilbur Odell Riley
James H. Rothrock,Jr.
Charles Deming Shaw
Calvin B. Simmons
Roger W. Smith
Frank J. Waddell
Russell L. Waldron
Fred Nathaniel Ward

Pursuit

Wyatt H. Alexander,Jr.
George Edward Batty
William Grover Benn
Eugene Brecht, Jr.
Earnest H. Briscoe
George E.M.Campbell

Pursuit

Kenneth Robert Case
Carl M. Christenson
George W. Conners,Jr.
Harry Lewis Dulin
Fred O. Easley, Jr.
Robert S. Fisher
Willard J. Foley,Jr.
Elbert B. Gentry
Fred'k L. Gunter
Albert F. Hastings
James C. Jensen
Harold L. Kreider
Robert J. McLean
Silas M. Miller
Thomas B. Mixon
Sterling R. Newman
John H. Patterson
Robert Jesse Potter
George Howard Prince
Charles W. Reineke
George I. Rhoades
Charles McC.Robertson
Joshua Wilson Rowe
Charles L. Sharp
Frank Dias Sinclair
Fred W. Smith
Ira David Snyder
James M. Treweek
Gilbert Von Tribbett
Terry Marvin Turner
Harry Warren Wells
Francis W.Williams
James R. Williams

---oOo---

COLORING UP A STORY FOR PUBLIC CONSUMPTION

A story in a New York newspaper of recent date conveyed the information that Private P.P. Butcher, of the 61st Service Squadron, Mitchel Field, N.Y., narrowly escaped being dragged into the air by one leg from an airplane moving at 115 miles an hour; that about 700 feet of one-half inch steel cable trailing behind the plane, which was 500 feet up, snaked across the field, gashed Butcher's leg, missed six other privates and cut into a steel hangar door.

The remainder of this newspaper story is quoted, as follows:

"Lieutenant Jonathan Haynes and Corporal William Burtnette had taken aloft a Falcon army biplane to test a new type of towed target for ground gun crews to shoot at. The target is a sleeve of fabric with metal rings at each end, so attached to 1,000 feet of cable that when a reneval sleeve is run down the wire, the first one falls to the ground for examination.

Flying low across the field, Corporal Burtnette released a second target, but both sleeves fell off and about 700 feet of the cable trailed on the field,

when the wind tension against the targets was removed. As the cable swished along the ground, Butcher and six other privates scattered for cover and Burtnette began to reel in the wire as fast as he could. The cable cut into the hangar door, swirled about and a length of it wrapped around Butcher's right leg. He got free, however, almost at once and went to the post hospital with a deep cut, but otherwise unhurt.

Pilots at the field said that if the cable had held to Butcher's leg, the leg might have been torn off or Butcher dragged into the air or the plane been wrecked."

In commenting on this story, the News Letter Correspondent from Mitchel Field states that it gives a general idea of what happened. "Of course," he adds, "we have not as yet attempted using 1000 or 1500 feet reels of half inch cable for our tow target work.

The flight in question had for its object the service testing of the new B-11 tow targets. While flying over the field at an altitude of 500 feet with approximately 700 feet of cable out carrying the standard A-4 target, the B-11 was sent along the cable. It tripped the release on the A-4, allowing it to drop to the ground. Following this, the ring on the B-11 broke, allowing it to drop also. The tension being relieved from the cable, its trailing end fell to the ground near some enlisted men. All but Pvt. Butscher managed to get out of the way. The cable struck his leg barely breaking the skin. It then hit the door of the Engineering hangar. By this time the operator was reeling in his cable. No damage was done to the hangar door."

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SWIMMING PARTY FOR MULES

"Crissy Field has been taking to sea since the recent heavy rains," says the News Letter Correspondent, and he then goes on to say: "We lost tons of valuable field terrain when some of the old drain pipes caved in and started out to sea.

The local Doughboys have been doing a lot of mule wrangling of late. Curious as to whether a mule would sink or swim, if participating in a landing party, the soldiers have been trying them out by boosting said mules off the dock. In a recent excursion after local color, ye scribe journeyed to the Crissy Field dock and learned a lot. The foot soldiers from up on the hill have evidently been watching the Air Corps mechanics swinging props. In every instance the mule was reluctant to take part in the experiment, so one of the attending chaperones would grasp the old jug-head's tail firmly and swing it clockwise. If there was no evidence of starting, the said manipulator would then swing the tail vigorously counter-clockwise. By this time the victim was fed up with the whole performance and took the path of least resistance - a nose dive. There were instances where a little priming would doubtless have been extremely useful, but apparently no priming equipment had been developed.

After making his bored progress to shore, the next move of the mule was to explore Crissy Field for grass. There wasn't much grass - but, Oh, how he rambled! Mules are like a lot of people - they are always wanting to be where they ain't. After lingering longingly in the vain hope that a couple of mules would start an interesting diversion by going to sea, this amanuensis returned to the inner sanctum to ruminate on why is a mule anyway.

When those mules surfboard over the breakers at Waikiki, won't they miss the little waves on Crissy's coral strand! Hush-Hush! It's not at Waikiki - but that's the only beach we know in Hawaii."

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WORLD FLIGHT NAVIGATOR LECTURES ON AERIAL NAVIGATION

Mr. Harold Gatty, senior aerial navigation research engineer of the Air Corps, is at the present time conducting a course in aerial navigation at Bolling Field, D.C., and at the Office of the Chief of the Air Corps. The course covers a period of 36 classroom hours and embraces all phases of pilotage, dead reckoning, celestial navigation and radio navigation.

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The First Balloon Company, Fort Sill, Okla., boasts a crack pistol team (4 or 5 men) and desires either telegraphic or radio matches with any Air Corps unit on any standard small bore ranges stipulated by the challenging team or teams.

PURSUITERS FERRY PLANES FROM SEATTLE TO SELFRIDGE

Seven pilots left Selfridge Field February 5th for Seattle, Wash., via rail, to secure and ferry to their home station P-12E Pursuit planes. The party was made up of Major George H. Brett, Commanding Officer of Selfridge Field, Lieuts. Culbertson, French, Garrison, Putt, Sillin and Wright. The flight was organized early on the trip out, and appropriate officers appointed to handle the routine ground work incident to the return trip by air.

The time on the train was passed in various activities of one sort or another, the most outstanding being the initiation of the junior officers into the well known Air Corps Organization of R.H.I.P., when it became necessary to elect one member of the flight to represent the group on a ride in one of the new type electric locomotives. The representative being duly elected and installed in the cab of the locomotive, the junior members of the flight repaired to the club car and formed a counter organization, the name of which may not be mentioned here, but membership in which was equally enjoyable. The remainder of the train trip was uneventful, and the flight arrived in Seattle at eight O'clock on the morning of the 8th.

At Seattle the pilots were met by the Air Corps representative stationed with the Boeing Company. After preliminary greetings, they were taken to the Washington Athletic Club for a quick shower and change of clothing. This accomplished, bags were hurriedly repacked, and pilots were rushed to throbbing cars below in which they were speedily whisked to the field.

At the field the pilots found acceptance papers prepared for signature, tool kits and equipment handily arranged for speedy check, and all ships on the line with engines warmed and idling in readiness for the take-off. After a short test hop, the flight was allowed a hurried tour of inspection of the Boeing Plant, followed by a luncheon with the Boeing executives. Upon return to the field, the ships were found fully serviced and everything in readiness for departure. Baggage was quickly packed, final weather reports and clearances were obtained, and the flight cleared the airport early in the afternoon. The whole thing was handled with the utmost Teutonic efficiency, and the time spent in Seattle was cut to a minimum.

After an uneventful flight, the pilots arrived at Vancouver, Wash., where the night was spent. The Commanding Officer, having flown the course several times before, rotated the lead so that each officer would have a chance to navigate over strange territory. The flight cleared Vancouver Barracks around nine the next morning and stopped for gas at Medford, Oregon. A slight difficulty arose here when the pilot who was leading at the time, after locating Medford, failed to locate the airport. The Flight Commander who, with usual diligence, was carefully checking the course, flew alongside to see what the leader would do. The leader, with the able assistance of his wing men, fimally spotted the field, and a safe landing was made by all. The pilots had lunch while the ships were being serviced, and the flight then cleared for San Francisco. After an hour or more flying over the Siskyiou Mountains and by the snow-capped peak of Shasta, the flight entered the fertile Sacramento Valley and landed at Crissy Field.

Quarters not being available at Crissy Field, the major portion of the flight decided to stay in San Francisco, where excellent accommodations were obtained at the Bellview Hotel at reasonable rates. Bad weather caused a two-day delay, which was thoroughly enjoyed. The next "hop" was made towards March Field, wherein the leader, lacking his Missouri Valley section lines and becoming slightly bewildered, wandered amiably between the Rocky Mountains and the Pacific Ocean. After a given period of time, and to the utter amazement of all, a permanent check point was spotted and Bakersfield ultimately located. Clouds were forming on the mountains south and east of Bakersfield and, after trying to fly through Tehachapi Pass, the flight commander returned the flight to Bakersfield for a landing. An hour was lost gassing and waiting for favorable weather reports. The flight from Bakersfield across the ridge down into the Mojave Desert and through Cajon Pass to March Field took less than two hours.

One night at March Field, where old acquaintances were renewed and new ones made, and the flight proceeded to Rockwell Field. Here the ships were thoroughly inspected and plans made to leave the following morning. That evening, off duty procedure was the same as at March Field. A short tour of inspection was arranged to the nearest foreign country by officers stationed at Rockwell, and all pilots were on the line the next morning with baggage packed and ships warmed. Weather was doubtful, but being a day behind time it was de-

cided to take off and try to get through to the next stop. After a 20-minute flight, it was apparent that there was no chance to cross the mountains, so a return to Rockwell was necessary. The usual wrestling with P-12E baggage compartments was once more in order, and pilots, by this time being fairly proficient at baggage smashing, soon were back at the previous evening's abode. Another tour of inspection was instigated to investigate the prosperity of lower California. The source of prosperity soon became apparent and it was decided to return to Coronado. February 14th dawned cloudy and rainy, and clearance was impossible. Shopping and Contract occupied most of the day. The following morning was clear and the flight proceeded to Tucson, Arizona.

The hop from Rockwell to Tucson was made without incident. It was necessary to climb above the clouds to cross the San Jacinto mountains and pass Chimney Peak. A nice bit of navigating featured this leg, as a good half hour of flying in a strong variable cross wind was done without check points. Servicing at Tucson took a little over an hour, and the flight was on its way to El Paso. Arriving at Fort Bliss, pilots were furnished transportation to El Paso, where rooms were arranged at the Hussman Hotel. All members of the flight were interested in an old fashioned Mexican dinner, so Juarez was visited, the meal eaten and several souvenirs purchased.

Left Fort Bliss the following morning and reached Midland, Texas, after the leader had negotiated every turn in a nearby pipe line. After servicing, the flight was on its way to Dallas, where an excellent fried chicken dinner was enjoyed at the home of one of the members of the flight. After a good night's sleep, all proceeded to Muskogee, Okla., where it was decided to make Kansas City the next stop, the weather to Scott being questionable. A night in Kansas City, and the flight started on the last leg of the trip to Selfridge. A good tail wind was encountered from Kansas City to Selfridge, and record time was made home, the only delay being a short stop at Chanute Field for gas, oil and lunch.

The whole trip proved very successful and all ships landed at Selfridge Field in good condition. It was the concensus of opinion among members of the flight that the new Boeing ship was thoroughly dependable. All junior members of the flight expressed their appreciation to the Commanding Officer for the valuable experience gained during the flight.

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CAPTAIN STEVENS RETURNS FROM MAPPING PROJECT

By the Wright Field Correspondent

A final practical test of the experimental model 5-lens camera has just been completed. Captain Albert W. Stevens, photographer, and Lieut. J.F. Phillips, pilot, returned to the Materiel Division from California on February 17th, having been engaged on a mapping project of the Sacramento and San Joaquin river valleys. The flying base was Crissy Field, San Francisco, with occasional flights from Mather Field when weather conditions at Crissy were unfavorable. The area covered was 1,000 square miles. This work was on an unusually large scale, and the photographs were obtained from low elevations, with great side and end overlap. Nine thousand negatives were made for the U.S. Coast and Geodetic Survey, which is preparing new large-scale maps of this region.

The camera used was a T-3A or 5-lens type developed by the Materiel Division, following the original 3-lens camera designed by Major J.W. Bagley. The negative material was a new aerial supersensitive panchromatic film on a special non-shrink base. With this film excellent photographs were obtained in winter weather, early mornings and late afternoons through ray filters which excluded all blue light. Haze and water vapor reflect much blue, and it is desirable to prevent light of this color from reaching the negative in order to obtain clear, snappy photographs.

Two missions, resulting in 1700 negatives a day, were flown on several occasions. All negatives were developed by the 15th Photographic Section at Crissy Field, several of the last missions also being flown by that section.

The printing of the negatives was done under the direction of Captain Bruce Hill at the Materiel Division Photographic Laboratory, and 11,482 prints were made and forwarded to the U.S. Coast and Geodetic Survey in Washington. This organization is reimbursing the Air Corps for the cost of the project, including materials and flying. The airplane used was the F-1A Army monoplane built especially for photographic work, with maximum ceiling of 23,000 feet.

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS

CHANGES OF STATION: To Wright Field, Ohio: Major Wm. E. Kepner from Advanced Flying School, Kelly Field.

To Fort Leavenworth, Kansas, for duty as Instructor: Major George E. Stratemeyer (upon completion course at this School), and Major Thomas J.Hanley, Randolph Field, Tex. (To Command and General Staff School).

To Kelly Field, Texas: 1st Lieut. Edgar T. Selzer, from Scott Field,Ill.;

To Army Industrial College, Washington, D.C. (1932-33 course): Major W.R. Weaver and 1st Lt. Julian B. Haddon, O.C.A.C., Washington; Majors Lawrence S. Churchill, Langley Field; R.M. Jones and 1st Lt. A.W.Martenstein, Wright Field, Ohio; Major S.W. FitzGerald, Army War College, Washington.

To Maxwell Field, Ala.: Capt. Sam L. Ellis from Philippines. To duty with Staff and Faculty, Tactical School, upon completion course at Command and Gen. Staff School, Ft. Leavenworth - Capts. Frederick I. Eglin, A.K. Ladd, J.I.Moore.

To Philippines: Majors G.E. Brower, Selfridge Field; Douglas B.Netherwood, Tactical School, Maxwell Field; 1st Lts. James W. Hammond, Langley Field, Va., and Walter E. Richards, Mather Field.

To Randolph Field, Texas: Major Henry W. Harms from Philippines; Captain Karl S. Axtater, 1st Lt. Randolph P. Williams, Wright Field, for training.

To Brooks Field, Texas: Major Benj. G. Weir, from C. & G.S. S., Fort Leavenworth; 1st Lt. Milton J. Smith from Middletown, Pa., Air Depot.

To Mitchel Field, N.Y.: Major Henry J.F. Miller, from C. & G.S.School.

To Langley Field, Va.: Captain Edward C. Black, from Philippines.

To Fort Crockett, Texas: Capt. Lloyd L. Harvey from C. & G.S.S. L'worth.

To Ft. Leavenworth, Kans., for duty with Air Corps Detachment: Major V.B. Dixon, upon completion instruction at Command and General Staff School.

To March Field, Calif.: 2nd Lt. D.W. Buckman, from Panama. Previous orders in his case revoked.

To Rockwell Field, Calif.: 1st Lt. Cecil E. Archer, O.C.A.C.,Washington.

To Fort Bragg, N.C.: 2nd Lt. John C. Covington from Mitchel Field, N.Y.

RELIEVED FROM DETAIL TO AIR CORPS: 1st Lieut. Harold J. Conway, Ord. Dept., to Fort Crockett, Texas; 2nd Lieuts. Wm. D. Davis, James T. McClellan, Merson L. Skinner, Maynard N. Levenick, Richard K.Boyd and Harry G. Roller to Infantry, 2nd Div., Fort Sam Houston, Texas; Edwin A. Walker, Terrence R.J. Hickey,Irving W. Jackson, to Field Artillery, 2nd Div., same post; Cornelius Licherie and James C. Blanning to 1st Cavalry Div., Fort Clark, Texas; Marvin L. Thomas to 1st Engineers, Fort DuPont, Del.; Wm. R. Woodward to 22nd Inf., Ft.McPherson,Ga.

PROMOTIONS: To Colonel: Lt.-Col. Roy C. Kirtland, rank from Feb. 1,1932; To Lieut.-Colonel: Major H.C. Kress Muhlenberg, rank Jan. 28, 1932; Majors John F. Curry and James E. Chaney, rank Feb. 1, 1932; To Major: Captains Harry H. Young and Donald Wilson, rank Feb. 1st; To Captain: 1st Lieuts. Donald G. Stitt, rank Jan. 22, 1932; Glenn C. Salisbury and Harold R. Wells, rank Feb. 5th and 8th, respectively; To 1st Lieut.: 2nd Lieuts. Morris R. Nelson, Feb.1st, Kenneth P. McNaughton, Feb. 5th.

RETIREMENT: 1st Lieut. Richard H. Dean, Crissy Field, to proceed to his home.

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AERIAL PHOTOGRAPHY IN LOUISIANA

Personnel of the 5th Photo Section, Scott Field, Ill., will perform the first photographic mission for the U.S. Geological Survey to be assigned to that Field for the 1932 season. The project, designated as L-32, comprises 17 fifteen-minute quadrangles in Louisiana, and the total area which will be photographed will be about 5,000 square miles.

Second Lieut. Herman F. Woolard, commanding the 5th Photo Section, pilot on the mission, with Master Sgt. Wilbur F. Rhodes as photographer and Corp. Paul Langlands as mechanic, left Scott Field in an F-1A cabin plane to make its first base at New Orleans. A T2-A four-lens camera will be used for the vertical shots and a K3-B, with an 8¼-inch focal length, will be used in making oblique photographs to assist the team in their work. All vertical photographs will be delivered with a scale of one over twenty thousand.

Due to the danger of flood conditions near New Orleans, the Geological Survey Department requested that photographs of the eight quadrangles near that city be taken first. These eight quadrangles are located in a block four long and two wide with New Orleans in the Northwest corner and contain about 2080 square miles. Lt. Woolard figures to complete this section of the project with five good photographic days.

Five more quadrangles to be covered are along the Gulf coast in Vermilion and Cameron Parishes. If it is possible to change the base of operations to Lake Charles, this work will be considerably expedited, as otherwise the plane will have to make flights averaging about 150 miles going to and from the area. It is expected to complete this area with three full flying days.

With the completion of this tract of about 1300 square miles, the base will

be shifted to Shreveport. Two quadrangles situated just northwest of Alexandria will require two photographic days for completion and then the final two quadrangles just northeast of Shreveport will receive attention.

Exposed rolls of film, containing about 175 exposures each, will be shipped to Scott Field immediately, and the production of the prints will be rushed day and night in order to deliver them at the earliest moment. With the use of the four-lens camera and any sort of a break in weather, Lieut. Woolard hopes to complete another mission at low cost per square mile even though it will be necessary to land and reload the camera after photographing about 1½ quadrangles.

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PRAISE FOR CHANUTE FIELD METEOROLOGICAL STATION

The Chief Signal Officer of the Army, Major-General Irving J. Carr, in a letter, dated Jan. 20, 1932, to the Signal Officer of the Sixth Corps Area, gives high praise to Chanute Field, Rantoul, Ill., for the excellence attained by the meteorological personnel at that station. The letter goes on to say:

"1. A careful examination of the meteorological reports sent regularly to the Office of the Chief Signal Officer from the thirty-four meteorological stations operated by the Signal Corps during the year 1932 has been made. These reports have been checked for accuracy, neatness and adherence to instructions in their preparation.

2. This check brings out the fact that of all reports received from meteorological stations, those received from the meteorological station at Chanute Field are consistently the most complete, accurate and satisfactory. These reports show that much care has been exercises at Chanute Field throughout the year to make the meteorological work of the Army accurate and dependable.

3. Technical Sergeant Frederick A. Matchinski, Private First Class John H. Butler, Private First Class Melvin R. Loring and Private Ralph W. Anderson are commended for close attention to duty and for the care exercised in the preparation of these reports and performance of meteorological work."

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OLD BOMBS PROVE ANYTHING BUT DUDS

Under the caption "Do Old Bombs Explode," an item in the News Letter of January 25th last, submitted by the Correspondent of the 18th Composite Wing, Hawaiian Department, stated that in an Ordnance demonstration test recently conducted at the Maili Range in the Waianae Mountains to determine whether bombs held in storage ten years would explode, a total of twelve bombs of various sizes were dropped, including two 2,000-pound bombs; that all bombs exploded except the first 2,000-pound bomb, which was a dud, and that the second bomb of this weight, dropped from 6,000 feet, resulted in a low order of explosion. The item concluded with the statement that the cause of the malfunctioning of these bombs had not been determined by the Ordnance experts.

A letter recently received by Capt. S.R.Stribling, Ordnance Dept., from an Ordnance officer at Honolulu, T.H., furnishes adequare proof through an enclosed photograph that the bombs were anything but "duds." This letter goes on to say:

"When we went out to dig for it we found a crater, 45 feet across, which was just about the size of the second bomb's crater. I could hardly believe my eyes. The terrific force of the detonation was evidenced by huge boulders up to three feet in diameter, located 75 feet from the crater center, being moved out of their "sockets" several inches, some being rolled on down the hill. A small grass fire had started in some grass which fell on one side of the crater. Boulders four feet in diameter had been blown out intact or split in two. Not a sign of any explosive around."

It appears that observers at the bombing demonstration reached the conclusion that the two big bombs failed to "do their stuff" because of no appreciable uprising of a shower of loosened earth and rocks following their explosion. This is explained in the above mentioned letter, as follows:

"In later tests with 155 mm. Howitzer shell, we have encountered several of these noiseless "duds," which turned out later to be high orders, so far below the ground as to be entirely quiet. I found in this later work four actual mounds instead of craters, and on digging in the mounds we found a great many fragments from high order detonators. "Duds" in this soft damp earth just cut a hole thru and lie at the bottom. Low orders out here make small craters, leave big fragments around and scatter junks of explosive on the ground and thru the dirt in the crater."

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A 12-ship formation from the 95th Pursuit Sqdn., flew from March Field to Phoenix, Ariz., by way of Tucson recently, and returned the following day. First Lieut. Leo H. Dawson, Squadron Commander, led the formation. Relatives of the late Lieut. Frank Luke were at the Phoenix Airport to meet Lieut. Dawson, who was the overseas flight leader of the famous "Arizona Balloon Buster." The pilots were overnight guests of Dr. A.J. Chandler, at Chandler, Arizona. Members of the formation were Lieuts. J.C. Crosthwaite, Alfred R. Maxwell, David D.Graves, Edward W. Anderson, Floyd H. Davidson, Aubrey S. Hurren, Joseph A. Brier, Arthur E. Livingston, Tim Roberson, John O. Zahn and Henry G. Reynolds.

MIDDLETOWN AIR DEPOT INAUGURATES AIR TRANSPORT SYSTEM

Shortly after the first of the year, the Middletown, Pa. Air Depot inaugurated a "Delivery by Air Service," to serve the three major stations in the Middletown area, viz: Langley, Bolling and Mitchel Fields, with the purposes in view of facilitating the delivery of supplies such as can be handled in a transport plane; creating savings in transportation funds and in time of deliveries; eliminating labor involved in packing and crating of supplies and the materials needed therefor; training personnel in the handling of supplies by transport; increasing the efficiency of pilots in flying fully loaded transports and affording them more cross-country experience and, in general, promoting greater efficiency in the operation of Depot and Station Supply organizations.

A YlC-14 is used as the transport plane. The dispatching of the transport and the assignment of pilots is under the direction of the Operations Officer. The Depot Supply Officer regulates the quantity and nature of the articles transported and loads and unloads the transport at the Depot.

Each station has detailed a crew to load and unload the transport. They have already become familiar with the proper methods in handling supplies and engines. While 1200 pounds is the maximum load to be carried on a trip, 1400 pounds may be carried if conditions warrant. In cases where no return load is available at the station a cargo of supplies is carried, a repairable engine is taken aboard. Station Supply Officers have been instructed so to arrange their shipments as to always have a load of supplies or a repairable engine available for the return trip of the transport.

All the stations are very enthusiastic over the success of this transport service and desire its continuance and enlargement. Parcel post and express shipments to the three stations served have been practically ended. An assured weekly delivery almost entirely eliminated emergency requisitions and should obviate the necessity of voluminous quarterly requisitions.

Figures compiled covering the operation of the Middletown Air Transport Service during the period January 8th to 29th, show that in a total of ten trips, 276 items, weighing 11,881 pounds, were delivered to the three Air Corps fields named above, involving an estimated saving of $640.89, of which $207.00 covered saving in labor for packing, $300.00 for packing materials and $123.89 which it would have cost to send these supplies by rail. Of these shipments, Langley Field received 64 items, aggregating 4,714 pounds; Bolling Field 143 items, aggregating 3,415 pounds, and Mitchel Field 69 items, aggregating 3,752 pounds.

Incoming shipments by air to the Depot from these fields, during the period January 11th to February 1st, totalled 188 items, aggregating 9,593 pounds. The estimated saving, covering labor for packing, packing materials and freight and express charges amounted to $460.57. Thus, the first month's operation of this air transport system saved an estimated outlay in funds of $1,101.46.

Out of ten scheduled trips during January, four were postponed, three because of weather and one because of an engine change in the YlC-14. All but one trip was completed the same day, the exception being a trip to Mitchel Field which was delayed because of severe gales and rain at Mitchel Field.

Five engines were transported. Articles of practically every classification were included in the shipments, including steel stock, barreled goods, baled clothing and rags, and lumber.

During February, in a total of 15 round trips, 576 items, totalling 18,122 pounds, were delivered, and 77 items, weighing 10,374 pounds, received. Bolling Field received 6,321 pounds and sent 4,320 pounds; Mitchel Field received 5,115 and sent 4,451 pounds, and Langley Field received 5,151 and sent 4,199 pounds. The total estimated savings on labor for packing, packing materials and charges estimated for rail transportation on both outgoing and incoming shipments was $1,543.25. Aside from the trips to Bolling, Mitchel and Langley Fields, three extra ones were made, one to Burgess Field with an engine replacement for a ship down, one to Waynesboro, Va., with an engine for a ship down, and the third to Burgess Field to return the removed engine and crew. Fourteen engines of all types were delivered to the Depot by air for overhaul.

Major J.H. Houghton, Commanding Officer of the Middletown Air Depot, commenting on the operation of the air transport system, states it is entirely practicable for a depot to serve its area by air, providing the proper type

transports are available. He prefers a bigger load-carrying airplane, such as a B-2 or a B-3 Bomber to the YlC Transport, because the latter's carrying capacity is limited and, further, because considerable damage is constantly being done to the interior of the cabin, chiefly in the handling of engines.

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NEW FLYING FIELD AT FORT SHAFTER

Considerable headway has been made in connection with the establishment of the new flying field at Fort Shafter, Honolulu, T.H. Under the direction of Air Corps personnel, a portion of the golf course is being leveled for use by the airplanes. Certain high spots are being graded down and some of the low places filled.

The plan is to make the field suitable for the landing of ambulance planes from distant points with patients for Tripler General Hospital and for courier planes carrying messages to Department Headquarters. Coincident with the announcement of this plan, stretchers for use in Bombing planes have been developed. The stretchers, which are of the light wire mesh type, can be attached to hooks in the bomb bay of a plane in about two minutes, tests have revealed. These will insure a convenient method of caring for any person being rushed to the hospital after an injury. Since the new airplane stretchers have been well devised, all Bombing planes have become ambulance planes as well. Landing of patients will be possible for any post on the Island within two hours, should an injury occur. The landing field lies just north of the Department Headquarters building and will be only 200 or 300 yards from the hospital.

It has long been planned to develop a field near Department Headquarters which would make it possible to supplement other forms of communication with the airplane. The field is due to be tested very shortly.

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AIR CORPS OFFICERS ASSIGNED TO FORT LEAVENWORTH

The following-named Air Corps officers have been designated by the War Department as students at the Command and General Staff School for the 1932-1934 course, and are under orders to proceed to Fort Leavenworth, Kansas, and report to the Commandant of that school not later than August 29, 1932, for duty accordingly:

Majors Harvey S. Burwell, Oliver P. Echols, Delos C. Emmons, Captains Elmer E. Adler and Lawrence P. Hickey, students at the Air Corps Tactical School, Maxwell Field, Ala.; Major Willis H. Hale, Office of the Chief of the Air Corps, Washington; Captains Christopher W. Ford, Kelly Field, Texas; Lester T. Miller, Langley Field, Va.; St. Clair Street, Wright Field, Dayton, Ohio.

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SEVENTH BOMBARDMENT GROUP TO HAVE INSIGNIA

After some months of reviewing histories, alteration and revision of designs, a suitable insignia has been worked out and forwarded for approval at Washington. The predominating colors of the insignia are blue and gold. The most impressive feature to the casual observer is the crest which is adorned by a winged skull and a bony arm and hand holding an upraised aerial bomb. Directly underneath the crest is a scroll bearing the Latin phrase "Mors Ab Alto," which, literally translated, means "Death From Above." The shield is divided into four sections, representing the 70th Service Squadron and the 9th, 11th and 31st Bombardment Squadrons. The sections representing the Bombardment Squadrons are properly charged with their respective war honors. The four maltese crosses in the 11th's section represent the four major engagements officially credited to the 11th. Three maltese crosses represent the 9th Squadron's official battle credits, and a Fleur De Lis represents the 31st Squadron's service in France as base school squadron at Issoudon.

The design is a combination taken from those submitted by 2nd Lieut. E.F. Kiessig, formerly of the 95th Pursuit Squadron; 2nd Lieut. Harold W. Bowman of the 11th Squadron, and Private Joseph M. Koleson, also of the 11th Squadron. The original was worked out and painted by Corporal Fritz Seaburg, of the 11th Squadron.

ENGINEERING NEWS

Development of direct military interest for the past month, as reported in the periodicals of the world, are meager.

New High-Power Searchlight:

One development, however, that seems to have excited the interest of editors in general is the new Savage searchlight in Great Britain. This light is unique both in power and arrangement. It is rated at three billion candlepower which is quite large for a single unit and, in addition, is capable of throwing a cross-sectioned beam. The value of this light used in conjunction with modern sound detecting equipment which, it is said, can locate raiding aircraft within a seven-degree cone is readily apparent, since the cross-sectioned beam is in the shape of a quadrilateral pyramid with an apex of twenty degrees. The dead light may therefore be trained on the aircraft with a positive degree of accuracy. After the searchlight is turned on, the aircraft can be made to pass through three or more of the cross-lines, from which its speed, altitude and direction may be determined. After these data have been recorded the whole beam can be concentrated instantly and used in the ordinary way for gunnery purposes. If the aircraft spins or dives out of the concentrated beam, the light can be immediately reconverted to the cross-sectioned beam and the aircraft located as it crosses one or more of the lines. The searchlight unit is entirely self-contained on a Tilling-Stevens petrol-electric chassis. The controls of the light are electric and remote. The light originates from an automatic arc in front of a parabolic mirror which projects the rays onto an image plate made of a large number of optical flats. The image extrudes the light at an angle of ninety degrees. By a rather ingenious mechanism the individual strips on which the flats are mounted are capable of being rotated through 180 degrees; in this way it is possible to change instantly from one cross section of beam to another. The whole barrel of the light may be rotated about its major axis and about a vertical line perpendicular to this major axis making the mounting nearly universal. The power required to maneuver the light about these axes is less than one h.p. Complete constructional details are,unfortunately, difficult to obtain.

New Navy Plane:

Another startling departure from ordinary engineering practice was the delivery to the Navy of a Berliner-Joyce XOJ-1 more than a hundred pounds under contract weight and fourteen miles per hour faster than contract speed.

Japanese Pursuit Plane:

On the matter of speed, it is reported with no official backing, that the Japanese have an all-metal monoplane fighter capable of 250 m.p.h. It is said to be powered with a 600 hp water-cooled engine. The consensus of opinion is that this performance estimate is optimistic.

Hermann Kohl Flying Wing:

A great deal of interest seems to be centering around the so-called flying wing and the Hermann Kohl design is the subject of most of it. Extremely low power requirements are claimed. The design is said to attain a top speed of 98 mph with a Bristol Cherub engine of 30 hp; the gross weight reported with this speed is about 1100 pounds. Observers of the test flight were said to be surprised at the maneuverability of the craft, probably because previous designs have been markedly lacking in that characteristic. In any event, a speed of such magnitude with a power loading of more than 36 lb/hp is worth more than passing notice.

Fuel Injection Systems:

Some attention has been given in the United States to fuel injection in spark ignition engines for aircraft. The Pratt & Whitney Co. have such an engine on service test on one of the western division airplanes where it is said that it is giving satisfactory performance. The advantage of such a fuel system over the conventional carburetor system from the standpoint of cold weather operation and distribution of fuel to the cylinders are apparent and it should be possible to effect a considerable saving in specific fuel consumption. It is possible that the power output per cubic inch of displacement can be increased with such a fuel system by means of valve overlap and pressure differential scavenging. In any event, the development indicates a distinct step forward in airplane power plant design.

Noise Reduction:

Noise reduction has claimed increasing attention both from the standpoint of comfort to passengers on transport lines and from the standpoint of concealing aircraft in flight from the enemy. Some interesting mufflers have been introduced on the Eastern Air Transport lines that are said to reduce the exhaust noise some seventy percent and induce a back pressure of only twelve inches of water. In addition, Mr. Maxim, of firearm silencer fame, has been quoted as having designs going through the patent office that will aid materially in the reduction of noises due to the propeller flutter.

Strength Requirements for Aircraft:

Numerous personages in the aircraft structures world have felt it their duty to say that something should be done about strength requirements now that

performances have been so materially increased and a few have written papers on the subject. The actual change in requirements will undoubtedly take place - sometime.

Stainless Steel:

All-metal structures are claiming increasing attention since the introduction of spot-welded stainless steel. Even Russia has an aircraft built entirely of this material. The data on the very thin sections used in this type of construction are very meager and will probably retard development, that is to say, sound development.

Mono-Spar Construction:

Mono-spar construction has been the aim of most airplane designers for a long period because of the possibility of weight reduction. The British have built and flown such a wing on a Fokker airplane and the weight per square foot approaches biplane construction weight, being 1.25 pounds per square foot. It may be that after charging off all the disadvantages of the biplane structure as weight the two structures may be comparable and may even give the monoplane mono-spar a slight edge.

Stearman Beta at Wright Field: Mr. E.T. Allen, of the Stearman Airplane Co., landed at Wright Field recently from Wichita, flying a new Stearman Beta which, he said, had averaged better than 200 m.p.h. for the flight with the aid of a stiff tail wind. The Beta is a modification of the Northrup Alpha, being a low wing, all-metal monoplane, with tapered stress-skin wing. The landing gear is of the full cantilever type, all shock loads being taken by an oleo strut in the wing. Wheels are streamlined into a trouser fairing. The power plant is a Wasp Junior engine, developing 300 h.p. Top speed is 204 m.p.h. at the ground. This little single-seater remained for a day for the inspection of Air Corps Engineers with a view to its possible usefulness for military work. It was later flown to New York for delivery to a private owner.

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FATAL ACCIDENT AT SELFRIDGE FIELD

The personnel of Selfridge Field is saddened by the loss of one of their members, Lt. Lee C. Weber, Air Reserve, who was instantly killed in an aircraft accident near the Field on Feb. 10th. On that date Lieut. Weber was a member of a 3-plane flight bringing three new Curtiss P-6E planes from Buffalo, N.Y.

Taking off, with good weather reports along the route, the formation experienced good flying conditions until within five miles of Selfridge Field, where they encountered a wall of fog which had suddenly settled over the field. The leader immediately turned about to search for a suitable field in which to land. On one of the turns Lt. Weber left the formation and disappeared. The other two planes landed in a farmer's field near New Baltimore, Mich. A few moments later, Lt. Weber, after flying in the vicinity of Selfridge Field, crashed near the South River Road, about ½ mile southwest of the Field. His parachute was open and it was evident from the relative positions of the plane and body that he attempted to use his parachute at too low an altitude for it to function. No reason can be given for Lt. Weber's entering the foggy area after leaving the formation.

A simple but effective tribute was paid Lieut. Weber by the garrison of Selfridge Field at a ceremony held the afternoon of Feb.12th. The entire command was paraded in a hollow square as Rev. Schellhase, Chaplain, Reserve Corps, conducted the ceremony and the 36th Squadron, of which Lieut. Weber was a member, flew a funeral formation overhead. The entire personnel of the field attended the ceremony, after which the body was shipped to Davenport, Iowa, where funeral services were held by the members of his immediate family.

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BOMBARDMENT PILOTS PURSUE TRAINING PROGRAM

The 2nd Bombardment Group, Langley Field, Va., rather doggedly carried out the rigid training program drawn up at the beginning of the training season. Generally fair weather aided the progress, especially in night flying. Many interesting flights were performed the past month with only a minimum number of accidents. Considerable flying was performed over long stretches of open water, namely, Chesapeake Bay and certain areas of the deep blue sea, with the attendant risks of such ventures relegated to the background of the Flyers' minds. Rapid development of aircraft and engines to a point where mere speculation upon performance has ended has done much to promote confidence and heighten the morale of the pilots.

In a recent night bombing raid over Washington, 27 planes made the flight to the Capital, following the commercial route and using the light beacons. Two planes were forced down with, fortunately, no casualties or damage to the planes. Low oil pressure and an overheated engine forced Lt. J.F. Biggerstaff down at Urbanna, Va., while Lt. W.C. Jamison, who got on the Richmond-Washington beacons by mistake in an area of low visibility, landed at West Point, Va. A 50-mile gale made it difficult for the pilots to keep on the course, even though they could see the beacons. Night flights are regularly made by the Group between Richmond and Langley Field and points in between. Everyone gets a turn at following the Radio Beacon from Langley to Richmond and return. It is interesting to note that on all training maneuvers the Group is controlled in the air by radio command.